

## RIVER STAGES AND FLOODS FOR DECEMBER 1947

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Precipitation during December was above normal in the South-Central States from New Mexico, Texas, and Louisiana northward to Iowa and Illinois. It was also above normal along the coastal sections of the South Atlantic States and the central portions of the Plateau States. Precipitation was  $1\frac{1}{2}$  to 3 times the normal seasonal amounts in Kansas, Oklahoma, New Mexico, and northern Texas. It was also comparatively heavy along the coast of South Carolina and Georgia. In most of the other sections the precipitation averaged around one-half of normal.

The greatest snowfall on record for a single storm occurred in New York City on December 26th, when 25.8 inches fell during a period of 18 hours and 35 minutes. It was 4.9 inches above the record set in the 3-day blizzard in 1888. By the end of December the snow cover along the Atlantic Coast had been reduced to a trace below northern Maryland and central West Virginia, while in New England, eastern New York, the extreme eastern portion of Pennsylvania, and northern New Jersey the snow depths ranged from 6 inches to more than 2 feet. All traces of snow had by then disappeared from Kansas, Nebraska, western South Dakota, Missouri, most of Illinois, and much of Iowa. In the North-Central States only Minnesota, Wisconsin, Michigan, and much of North Dakota were covered with 3 inches or more of snow. Extreme depths exceeding 20 inches were reported from a few stations in the extreme northern portions of these States. During the last week in December the much-above-freezing afternoon temperatures melted most of the snow in the central and western areas. The only snow cover left toward the end of the month in the Pacific and Mountain States was at the highest elevations in the mountain ranges.

Temperatures during the month averaged above normal over the United States except in the New England States, New York, New Jersey, northeastern Pennsylvania, Minnesota, and most of the southern Rocky Mountain and Plateau regions.

The drought that began in Maine, in August, continued unabated through December. Stream flow was well below normal throughout the State during the month. Run-off was excessive in the coastal regions of the Southeastern States, with moderate flooding. Stream flow continued well above normal in the Gulf of Mexico region, but no damaging floods were reported. In Arkansas and northeastern Texas severe flooding was reported on many streams during the month. In the northern and central Rocky Mountain regions, run-off continued above normal; while in the southern California-western Texas region, run-off was deficient.

*Atlantic Slope drainage.*—The frequent heavy rains during November kept a few of the streams along the Atlantic Coast from North Carolina to Georgia above

flood stage during the last half of November and the first few days of December. Frequent moderate to heavy rains during December caused moderate rises to above-flood stage in the Edisto, Ogeechee, Ocmulgee, Oconee, and Altamaha Rivers in North Carolina, South Carolina, and Georgia during the latter half of the month. In these areas, lowlands were inundated, and the usual operations along the rivers were interrupted although the resulting damage was negligible. The inundation of the lowlands in Georgia caused postponement of such field activities as plowing and planting. Drought conditions continued again in Maine for the fifth consecutive month and extended southward during the month through all of the North and Middle Atlantic States except eastern Massachusetts and Rhode Island.

*East Gulf of Mexico drainage.*—Scattered heavy rains along the Gulf Coastal States during the period of December 8–16, caused light to heavy overflows on the Flint, Apalachicola, Choctawhatchee, Tombigbee, Pascagoula and Pearl Rivers between the 13th and the end of the month. Most of the precipitation during this period occurred in connection with the storm on the 9th–10th. Some of the 24-hour rainfall amounts reported were: 6.44 inches at Hattiesburg, Miss., 6.42 inches at Franklinton, La. The most serious flood reported in this area occurred on the Pearl River at Pearl River, La., where a stage of 15.4 feet was reported on the 15th. This was 3.4 feet above flood stage or 4.3 feet below the record stage reported in April 1900.

*Mississippi System.*—In the Arkansas Basin minor flooding occurred on the Poteau River in the vicinity of Poteau, on the 8th. This slight flooding was due to an average rainfall of 1.75 inches over the basin on the 6th–7th. To the south of the basin heavier rains of nearly 3 inches were reported. No damage resulted, as no overflow of importance takes place at this point below a river stage of 27 feet. In the Red Basin, light to heavy flooding occurred on the Sulphur River at Hagansport, Tex., and Naples, Tex., between the 7th and 27th. This flooding was due to heavy rains averaging about 6 inches over the basin on the 3rd and 4th, 6th and 7th, and 14th and 15th. The rainfall over the Cypress and Little Rivers was much less and only minor flooding occurred.

*West Gulf of Mexico drainage.*—Severe flooding occurred over the upper watershed of the Sabine River between the 8th and the end of the month as a result of the heavy rain that occurred over the upper basin on the 8th. This severe storm was followed by a 2-week rainy period that kept the river above flood stage for a similar period. The total damages were estimated near \$300,000. Rainfall over the upper Calcasieu River Basin was scattered and much lighter than over the Sabine River. Only slight flooding occurred at Kinder, La., on the 18th. No damages were reported. Two flash floods occurred in the upper Trinity River during the month, but the resulting overflows were light and no damage of consequence was reported.

## FLOOD STAGE REPORT FOR DECEMBER 1947

[All dates in December unless otherwise specified]

River and station	Flood stage	Above flood stages— dates		Crest <sup>1</sup>	
		From—	To—	Stage	Date
ATLANTIC SLOPE DRAINAGE					
Roanoke: Williamston, N. C.....	Feet 10	Nov. 8	Nov. 30	Feet 11.3	Nov. 20-21
Neuse:					
Goldboro, N. C.....	14	Nov. 13	Nov. 30	18.0	Nov. 21
Kinston, N. C.....	14	Nov. 15	2	16.7	Nov. 27
Edisto:					
Orangeburg, S. C.....	8	{ 11	19	8.4	16
		{ 21	30	8.9	24
Givhans Ferry, S. C.....	10	{ Nov. 13	2	11.7	Nov. 25
		{ 13	( <sup>1</sup> )	13.4	24
Ogeechee:					
Midville, Ga.....	6	16	19	6.1	17
Dover, Ga.....	7	{ Nov. 13	5	8.0	Nov. 24
		{ 13	( <sup>1</sup> )	9.1	21-22
Ocmulgee: Abbeville, Ga.....	11	{ 16	26	12.2	20
		{ 28	31	11.3	29
Oconee: Milledgeville, Ga.....	20	22	22	22.1	22
Altamaha:					
Charlotte, Ga.....	12	{ Nov. 14	6	17.2	Nov. 27
		{ 11	( <sup>1</sup> )	17.2	23, 24
Piney Bluff, Ga.....	17	{ Nov. 23	2	19.0	Nov. 26
		{ 14	( <sup>1</sup> )	18.4	23, 24, 25
EAST GULF OF MEXICO DRAINAGE					
Flint: Albany, Ga.....	20	18	18	20.0	18
Apalachicola: Blountstown, Fla.....	15	{ Nov. 15	2	17.2	Nov. 23
		{ 12	( <sup>1</sup> )	20.5	20
Choctawhatchee: Caryville, Fla.....	12	15	20	12.8	17
Tombigbee: Lock No. 3, Ala.....	33	17	21	37.9	19
Leaf: Hattiesburg, Miss.....	18	10	10	18.4	10
Pascagoula: Merrill, Miss.....	22	11	15	23.3	13
Pearl: Pearl River, La.....	12	13	26	15.4	15
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Mississippi: Louisiana, Mo.....	12	{ 4	10	12.5	5
		{ 16	17	12.0	16

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River and station	Flood stage	Above flood stages— dates		Crest	
		From—	To—	Stage	Date
MISSISSIPPI SYSTEM—continued					
Arkansas Basin					
Poteau: Poteau, Okla. ....	Feet 21	8	9	Feet 24.8	8
Red Basin					
Little: Whitecliffs, Ark. ....	25	11	12	25.7	11
Sulphur:					
Hagansport, Tex. ....	38	{ 7	9	39.5	8
		{ 16	19	39.7	17
Naples, Tex. ....	22	12	27	27.8	20
Cypress: Jefferson, Tex. ....	18	22	24	18.6	23
Atchafalaya Basin					
Atchafalaya: Morgan City, La. ....	6	15	15	6.1	15
WEST GULF OF MEXICO DRAINAGE					
Calcasieu: Kinder, La. ....	16	18	18	16.1	18
Sabine:					
Mineola, Tex. ....	14	8	23	17.4	20
Gladewater, Tex. ....	26	13	( <sup>1</sup> )	32.8	24
Elm Fork: Carrollton, Tex. ....	6	16	16	6.4	16
East Fork: Rockwall, Tex. ....	10	{ 7	11	12.9	10
		{ 15	19	14.8	17
Trinity:					
Dallas, Tex. ....	28	{ 8	9	32.1	8
		{ 16	17	33.5	16
Rosser, Tex. ....	26	{ 8	11	28.4	9
		{ 15	22	28.8	19
Trinidad, Tex. ....	28	{ 10	14	30.8	13
		{ 18	24	31.4	21
PACIFIC SLOPE DRAINAGE					
Snohomish: Snohomish, Wash. ....	20	18	19	20.3	18

<sup>1</sup> Provisional.<sup>2</sup> Continued at end of month.